International Seabed Authority ISBA/14/LTC/L.1

Legal and Technical Commission

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Provisional agenda of the Legal and Technical Commission

1. Opening of the session.
2. Adoption of the agenda.
3. Election of the Chairman and the Vice-Chairman.
4. Consideration of the annual reports of contractors submitted pursuant to the Regulations on prospecting and exploration for polymetallic nodules in the Area.
5. Selection of candidates for training by Germany, in accordance with the contract for exploration between the Authority, the German Federal Institute for Geosciences and Natural Resources, and the Federal Republic of Germany.
6. Review of an application for approval of a plan of work for exploration; and recommendation to the Council.
7. Consideration of the draft Regulations on prospecting and exploration for ferromanganese crusts in the Area (ISBA/13/LTC/WP.1).
8. Consideration of a proposal relating to the criteria for the establishment of preservation reference zones in the Clarion-Clipperton Zone.
9. Update on progress with the geological model for the Clarion-Clipperton Zone.
10. Consideration of the recommendations of the workshop on polymetallic nodule mining technology (Chennai, India, 18-22 February 2008).
11. Other matters.

08-26042 (E) 140408

International Seabed Authority ISBA/14/LTC/L.2

Legal and Technical Commission

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Fourteenth session
Kingston, Jamaica
26 May-6 June 2008

Nauru Ocean Resources Inc.

Application for Approval of a Plan of Work for Exploration

Executive Summary

1. Nauru Ocean Resources Inc., under the sponsorship of the Republic of Nauru, is seeking approval to obtain a contract to explore for polymetallic nodules in the area reserved by the International Seabed Authority (ISA) for developing nations, setting an exciting new milestone for the administration and development of resources within international waters. In carrying out the proposed Plan of Work, Nauru Ocean Resources intends to provide an example that other developing nations can follow, thereby assisting in ensuring that the resources in the Area are developed sustainably "for the benefit of mankind as a whole".

2. Nauru Ocean Resources is a Nauruan incorporated subsidiary of Nautilus Minerals Inc. ("Nautilus"), which is the world leader in the commercial exploration and sustainable development of deep sea mineral resources. Nautilus has among its largest shareholders two of the world's leading international resource companies, Teck Cominco and Anglo American, and is the only company in the world that has been able to successfully explore for polymetallic sulphides, sample, drill and trial mine in water depths greater than 1,500 m.

3. To date, Nautilus's activities have focused on pioneering the commercial development of seafloor polymetallic sulphides within the exclusive economic zones of south-west Pacific island nations, and Nautilus is working towards mining on its 100 per cent owned Solwara 1 Prospect in Papua New Guinea by 2010, subject to timely Government approval. Through Nauru Ocean Resources, Nautilus brings its world-leading deep sea exploration and mining expertise to polymetallic nodules within the Area.

4. Nauru Ocean Resources' application (the "Application") is being submitted to ISA in accordance with the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (the "Regulations"), and is divided into the following sections:

08-31318 (E) 280408

Section 1: Information concerning the applicant

5. Section 1 of the Application details information about Nauru Ocean Resources, including the applicant's contact details and information about its designated representative. A copy of Nauru Ocean Resources' Certificate of Incorporation has been submitted, as well as the applicant's Certificate of Sponsorship issued by the Republic of Nauru, which ratified the United Nations Convention on the Law of the Sea (the "Convention") on 23 January 1996. The Certificate of Sponsorship states that the applicant is sponsored by and under the effective control of the Republic of Nauru, and provides a declaration that the Republic of Nauru assumes responsibility in accordance with article 139, article 153, paragraph 4, and annex III, article 4, paragraph 4, of the Convention.

Section 2: Information relating to the application area

6. Section 2 provides information relating to the area under application, which covers a total combined surface area of 74,830 square kilometres. Location maps and a list of geographic coordinates defining the area boundary have been provided.

7. The application area lies within the ISA Reserved Area, and is divided into four regions: Area A is located within Block 13 and covers an area of 8,924 km^2; Area B is located within Block 15 and covers an area of 3,519 km^2; Area C is located within Block 22 and covers an area of 37,227 km^2; and Area D is located within Block 25 and covers an area of 25,160 km^2.

8. Nauru Ocean Resources is qualified to apply within the Reserved Area in accordance with regulation 17 of the Regulations as it is sponsored by and effectively controlled by the Republic of Nauru, a developing nation. Nauru Ocean Resources is incorporated and registered in Nauru, and subject to the laws of Nauru, and therefore comes under Nauru's effective control.

9. As the application area lies within the Reserved Area, ISA is already in possession of the technical data and information relating to the application area, and in accordance with advice received from ISA, this technical data is not resubmitted in the Application.

Section 3: Financial and technical information

10. Section 3 provides financial and technical information about Nauru Ocean Resources' parent company, Nautilus Minerals Inc. Nautilus's strong financial position is detailed, as well as its ability to conduct large-scale capital raisings as and when required to fund future exploration work. Indeed, Nautilus has consistently shown its successful record of financing and carrying out world-class exploration programmes and deep sea mineral development. For example, in 2007 Nautilus launched the world's largest commercial exploration and development programme for seafloor polymetallic sulphides at a cost of $26 million in the waters of Papua New Guinea, and in 2008 estimates that together with its partners, $34 million will be spent, and up to eight exploration vessels utilized, to carry out exploration programmes across Papua New Guinea, Tonga and New Zealand.

11. Nautilus is publicly listed on the Toronto Stock Exchange (TSX) and on AIM, a market operated by the London Stock Exchange, and in less than two years since listing has raised $334 million in cash to fund deep sea mineral exploration and mining.

12. Nautilus also has among its largest shareholders two of the world's leading international resource companies; Teck Cominco and Anglo American. Teck Cominco is a world leader in the production of zinc and metallurgical coal and a significant producer of copper, gold and specialty metals and has interests in several oil sands development assets, while Anglo American is one of the world's largest mining and natural resource groups, with a market capitalization of around $85 billion. Anglo is a global leader in platinum group metals and diamonds, with significant interests in coal, base and ferrous metals, an industrial mineral business and an investment in AngloGold Ashanti. These companies have made significant capital investments in Nautilus, and Nautilus will continue to finance exploration programmes through additional capital raisings from equity markets, as well as capital raisings from leading mining companies and industry partners. Nautilus's financial statements since incorporating as Nautilus Minerals Inc. have also been provided to ISA in accordance with regulation 12(5)(b).

13. Importantly, Nautilus's President and CEO, David Heydon, has accepted the role of Chairman of Nauru Ocean Resources and will direct the strategy and development of Nauru Ocean Resources and the polymetallic nodule project. Mr. Heydon has been instrumental in commercializing deep sea resource opportunities for Nautilus and positioning Nautilus as the world leader in this new offshore industry. Since taking Nautilus public in May 2006, Mr. Heydon has raised $334 million in cash for the company to fund development of seafloor polymetallic sulphides, demonstrating his ability to raise significant capital in short time frames, as well as the committed support he has from the world's capital markets, in which he has built a strong reputation and developed world class networks.

14. Section 3 also addresses technical capabilities, and demonstrates that Nautilus is the world leader in the commercial exploration and sustainable development of deep sea mineral resources. Some of Nautilus's recent exploration highlights include: completing the world's first drill-out of a seafloor polymetallic sulphide deposit; completing the world's first NI 43-101 compliant resource estimate for a seafloor polymetallic sulphide deposit; completing the world's first commercial electromagnetic survey of a seafloor polymetallic sulphide deposit; completing baseline environmental surveys at Solwara 1; nearing completion of the world's first environmental impact assessment for seafloor polymetallic sulphides in 2008; and successfully promoting and developing a range of new commercial tools for the seafloor mining industry to study, sample and delineate the seafloor environment, including geophysical, environmental, drilling, and mining tools.

15. Nautilus currently holds tenement licences and exploration applications in Papua New Guinea, Fiji, Tonga, Solomon Islands and New Zealand, and within these tenements, Nautilus has undertaken the world's largest exploration campaign for seafloor polymetallic sulphides, and has already discovered eight polymetallic sulphide fields, named Solwara 1-8. Nautilus's recent exploration programmes are detailed in this section, as well as the innovative technology Nautilus has promoted and developed with its partners, including: Remote Operated Vehicle (ROV) trial mining machine; ROV drill; electromagnetic survey tool; technology to carry out environmental studies; seafloor mining tool; and a riser and lifting (pumping) system for mining polymetallic sulphides at 2,000 metres below sea level.

16. Nautilus has also formed technical alliances with global leaders in the mining industry and offshore equipment, services and engineering industries, including the

likes of Teck Cominco, Anglo American, Soil Machine Dynamics, Technip, Canyon Offshore, and Ocean Floor Geophysics.

17. Nautilus's environmental experience and expertise is demonstrated, as well as its commitment to environmental sustainability and working closely with environmental agencies, government and stakeholders to ensure that undersea activities will not cause any long-term harm to the environment. This section also highlights Nautilus's commitment and contribution to social development in the countries in which it operates, as well as Nautilus's extensive employment and training of Papua New Guinea nationals in the fields of geology, geophysics and environmental science, highlighting the company's commitment to training and employment of nationals from developing countries.

18. A description of the equipment and methods expected to be used in Nauru Ocean Resources' exploration programme has also been provided, as well as information concerning its strong capacity to respond to incidents and emergency orders.

Section 4: Plan of Work

19. Section 4 provides a general description and schedule of the exploration programme for the initial five-year period, the objectives of which are to:

(a) Determine the most efficient and environmentally acceptable method to process and recover nickel, cobalt, copper and manganese from the polymetallic nodules, and define in what form these metals would report in a final product for sale, as well as the related capital and operating costs;

(b) Decide upon the optimum method to recover the material to surface with the minimum of environmental disturbance, as well as the related capital and operating costs;

(c) Define what grade of nickel, cobalt, copper and manganese is required in the polymetallic nodules for economic extraction, and determine through exploration what quantity and density of such material can be identified and delineated in the contract area.

20. In the first year of the programme, Nauru Ocean Resources proposes to undertake a compilation and detailed review of all existing data on the exploration area under contract, including detailed literature reviews of possible metallurgical flow paths. Samples recovered in previous nodule sampling programmes by third parties have already been obtained, and where possible, Nauru Ocean Resources will instigate initial metallurgical test work of these samples to help define the later exploration cruises and bulk sampling and testing programmes.

21. In the second and third year of the exploration programme, Nauru Ocean Resources proposes to carry out exploration cruises over the area under contract. These cruises would involve survey, sampling, and environmental studies. The principal aim of this work would be to establish the size and grade of the resource, to appropriate modern commercial resource reporting standards (e.g., NI 43-101 or JORC code), and obtain a sufficient bulk sample to allow the resources' principal metallurgical characteristics to be determined.

22. On completion of the fieldwork, Nauru Ocean Resources would propose to undertake a pre-feasibility study involving: baseline environmental studies; resource

estimations; preliminary engineering and metallurgical studies and design work for both the onshore and offshore components; and preliminary economic and commercial studies to provide scoping estimates for CAPEX and OPEX for mining, transportation and processing options.

23. Starting in the fourth year, Nauru Ocean Resources would propose to commence a feasibility study. The purpose of this study would be to define to a high order of accuracy the engineering and design parameters required for the mining and processing of the nodule resource, as well as to complete detailed resource estimation work to provide sufficient resource and confidence in the resource parameters to allow project financing. As well as identifying first-generation mine sites, Nauru Ocean Resources would also propose to develop mining solutions to recover the nodules and transfer them to transport vessels, as well as completing a detailed assessment of the project's expected environmental impacts.

24. This section also demonstrates that Nauru Ocean Resources' plan of work provides for the effective protection of human health and safety, as well as the effective protection and preservation of the marine environment. A description of the programme for oceanographic and environmental baseline studies that Nauru Ocean Resources proposes to carry out is included, as well as the measures that will be taken to prevent, reduce and control possible environmental impacts. The proposed studies reflect those included in the recommendations issued by the Legal and Technical Commission in 2001, and would be carried out in accordance with the Regulations.

25. It is also ensured that no installations will be established where interference is caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity, and that prior to the commencement of exploration a training programme will be drawn up in cooperation with ISA and the sponsoring State, and submitted to ISA for approval.

Section 5: Undertakings

26. Section 5 contains a copy of the written undertakings signed by the Chairman of Nauru Ocean Resources Inc. stating that it will comply with regulation 14 of the Regulations.

Section 6: Previous contracts with the International Seabed Authority

27. Section 6 states that Nauru Ocean Resources has not been awarded any previous contract with ISA.

28. Nauru Ocean Resources plans to successfully develop this project in a way that benefits the people of Nauru, ISA and the international community, and looks forward to working under the ISA regime to develop these resources within the Area.

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Tongan Offshore Mining Limited

Application for Approval of a Plan of Work for Exploration

Executive Summary

1. Tonga Offshore Mining Limited, under the sponsorship of the Kingdom of Tonga, is seeking approval to obtain a contract to explore for polymetallic nodules in the area reserved by the International Seabed Authority (ISA) for developing nations, setting an exciting new milestone for the administration and development of resources within international waters. In carrying out the proposed Plan of Work, Tonga Offshore Mining intends to provide an example that other developing nations can follow, thereby assisting in ensuring that the resources in the Area are developed sustainably "for the benefit of mankind as a whole".

2. Tonga Offshore Mining is a Tongan incorporated subsidiary of Nautilus Minerals Inc. ("Nautilus"), which is the world leader in the commercial exploration and sustainable development of deep sea mineral resources. Nautilus has among its largest shareholders two of the world's leading international resource companies, Teck Cominco and Anglo American, and is the only company in the world that has been able to successfully explore for polymetallic sulphides, sample, drill and trial mine in water depths greater than 1,500 m.

3. To date, Nautilus's activities have focused on pioneering the commercial development of seafloor polymetallic sulphides within the exclusive economic zones of south-west Pacific island nations, and Nautilus is working towards mining on its 100 per cent owned Solwara 1 Prospect in Papua New Guinea by 2010, subject to timely Government approval. Through Tonga Offshore Mining, Nautilus brings its world-leading deep sea exploration and mining expertise to polymetallic nodules within the Area.

4. Tonga Offshore Mining's application (the "Application") is being submitted to ISA in accordance with the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (the "Regulations"), and is divided into the following sections:

08-31325 (E) 280408

Section 1: Information concerning the applicant

5. Section 1 of the Application details information about Tonga Offshore Mining, including the applicant's contact details and information about its designated representative. A copy of Tonga Offshore Mining's Certificate of Incorporation has been submitted, as well as the applicants' Certificate of Sponsorship issued by the Kingdom of Tonga, which ratified the United Nations Convention on the Law of the Sea (the "Convention") on 2 August 1995. The Certificate of Sponsorship states that the applicant is sponsored by and under the effective control of the Kingdom of Tonga, and provides a declaration that the Kingdom of Tonga assumes responsibility in accordance with article 139, article 153, paragraph 4, and annex III, article 4, paragraph 4, of the Convention.

Section 2: Information relating to the application area

6. Section 2 provides information relating to the area under application, which covers a total combined surface area of 74,713 square kilometres. Location maps and a list of geographic coordinates defining the area boundary have been provided.

7. The application area lies within the ISA Reserved Area, and is divided into six regions: Area A is located within Block 2 and covers an area of 10,281 km^2; Area B is located within Block 15 and covers an area of 9,966 km^2; Area C is located within Block 22 and covers an area of 15,763 km^2; Area D is located within Block 20 and covers an area of 7,002 km^2; Area E is located within Block 21 and covers an area of 15,881 km^2; and Area F is located within Block 25 and covers an area of 15,820 km^2.

8. Tonga Offshore Mining is qualified to apply within the Reserved Area in accordance with regulation 17 of the Regulations as it is sponsored by and effectively controlled by the Kingdom of Tonga, a developing nation. Tonga Offshore Mining is incorporated and registered in Tonga, and subject to the laws of Tonga, and therefore comes under Tonga's effective control.

9. As the application area lies within the Reserved Area, ISA is already in possession of the technical data and information relating to the application area, and in accordance with advice received from ISA, this technical data is not resubmitted in the Application.

Section 3: Financial and technical information

10. Section 3 provides financial and technical information about Tonga Offshore Mining's parent company, Nautilus Minerals Inc. Nautilus's strong financial position is detailed, as well as its ability to conduct large-scale capital raisings as and when required to fund future exploration work. Indeed, Nautilus has consistently shown its successful record of financing and carrying out world-class exploration programmes and deep sea mineral development. For example, in 2007 Nautilus launched the world's largest commercial exploration and development programme for seafloor polymetallic sulphides at a cost of $26 million in the waters of Papua New Guinea, and in 2008 estimates that together with its partners, $34 million will be spent, and up to eight exploration vessels utilized, to carry out exploration programmes across Papua New Guinea, Tonga and New Zealand.

11. Nautilus is publicly listed on the Toronto Stock Exchange (TSX) and on AIM, a market operated by the London Stock Exchange, and in less than two years since

listing has raised $334 million in cash to fund deep sea mineral exploration and mining.

12. Nautilus also has among its largest shareholders two of the world's leading international resource companies; Teck Cominco and Anglo American. Teck Cominco is a world leader in the production of zinc and metallurgical coal and a significant producer of copper, gold and specialty metals and has interests in several oil sands development assets, while Anglo American is one of the world's largest mining and natural resource groups, with a market capitalization of around $85 billion. Anglo is a global leader in platinum group metals and diamonds, with significant interests in coal, base and ferrous metals, an industrial mineral business and an investment in AngloGold Ashanti. These companies have made significant capital investments in Nautilus, and Nautilus will continue to finance exploration programmes through additional capital raisings from equity markets, as well as capital raisings from leading mining companies and industry partners. Nautilus's financial statements since incorporating as Nautilus Minerals Inc. have also been provided to ISA in accordance with Regulation 12(5)(b).

13. Importantly, Nautilus's President and CEO, David Heydon, has accepted the role of Chairman of Tonga Offshore Mining and will direct the strategy and development of Tonga Offshore Mining and the polymetallic nodule project. Mr. Heydon has been instrumental in commercializing deep sea resource opportunities for Nautilus and positioning Nautilus as the world leader in this new offshore industry. Since taking Nautilus public in May 2006, Mr. Heydon has raised $334 million in cash for the company to fund development of seafloor polymetallic sulphides, demonstrating his ability to raise significant capital in short time frames, as well as the committed support he has from the world's capital markets, in which he has built a strong reputation and developed world-class networks.

14. Section 3 also addresses technical capabilities, and demonstrates that Nautilus is the world leader in the commercial exploration and sustainable development of deep sea mineral resources. Some of Nautilus's recent exploration highlights include: completing the world's first drill-out of a seafloor polymetallic sulphide deposit; completing the world's first NI 43-101 compliant resource estimate for a seafloor polymetallic sulphide deposit; completing the world's first commercial electromagnetic survey of a seafloor polymetallic sulphide deposit; completing baseline environmental surveys at Solwara 1; nearing completion of the world's first environmental impact assessment for seafloor polymetallic sulphides in 2008; and successfully promoting and developing a range of new commercial tools for the seafloor mining industry to study, sample and delineate the seafloor environment, including geophysical, environmental, drilling and mining tools.

15. Nautilus currently holds tenement licences and exploration applications in Papua New Guinea, Fiji, Tonga, Solomon Islands and New Zealand, and within these tenements, Nautilus has undertaken the world's largest exploration campaign for seafloor polymetallic sulphides, and has already discovered eight polymetallic sulphide fields, named Solwara 1-8. Nautilus's recent exploration programmes are detailed in this section, as well as the innovative technology Nautilus has promoted and developed with its partners, including: Remote Operated Vehicle (ROV) trial mining machine; ROV drill; electromagnetic survey tool; technology to carry out environmental studies; seafloor mining tool; and a riser and lifting (pumping) system for mining polymetallic sulphides at 2,000 metres below sea level.

16. Nautilus has also formed technical alliances with global leaders in the mining industry and offshore equipment, services and engineering industries, including the likes of Teck Cominco, Anglo American, Soil Machine Dynamics, Technip, Canyon Offshore, and Ocean Floor Geophysics.

17. Nautilus's environmental experience and expertise is demonstrated, as well as its commitment to environmental sustainability and working closely with environmental agencies, government and stakeholders to ensure that undersea activities will not cause any long-term harm to the environment. This section also highlights Nautilus's commitment and contribution to social development in the countries in which it operates, as well as Nautilus's extensive employment and training of Papua New Guinea nationals in the fields of geology, geophysics and environmental science, highlighting the company's commitment to training and employment of nationals from developing countries.

18. A description of the equipment and methods expected to be used in Tonga Offshore Mining's exploration programme has also been provided, as well as information concerning its strong capacity to respond to incidents and emergency orders.

Section 4: Plan of Work

19. Section 4 provides a general description and schedule of the exploration programme for the initial five-year period, the objectives of which are to:

(a) Determine the most efficient and environmentally acceptable method to process and recover nickel, cobalt, copper and manganese from the polymetallic nodules, and define in what form these metals would report in a final product for sale, as well as the related capital and operating costs;

(b) Decide upon the optimum method to recover the material to surface with the minimum of environmental disturbance, as well as the related capital and operating costs;

(c) Define what grade of nickel, cobalt, copper and manganese is required in the polymetallic nodules for economic extraction, and determine through exploration what quantity and density of such material can be identified and delineated in the contract area.

20. In the first year of the programme, Tonga Offshore Mining proposes to undertake a compilation and detailed review of all existing data on the exploration area under contract, including detailed literature reviews of possible metallurgical flow paths. Samples recovered in previous nodule sampling programmes by third parties have already been obtained, and, where possible, Tonga Offshore Mining will instigate initial metallurgical test work of these samples to help define the later exploration cruises and bulk sampling and testing programmes.

21. In the second and third year of the exploration programme, Tonga Offshore Mining proposes to carry out exploration cruises over the area under contract. These cruises would involve survey, sampling, and environmental studies. The principal aim of this work would be to establish the size and grade of the resource, to appropriate modern commercial resource reporting standards (e.g., NI 43-101 or JORC code), and obtain a sufficient bulk sample to allow the resources' principal metallurgical characteristics to be determined.

22. On completion of the fieldwork, Tonga Offshore Mining would propose to undertake a pre-feasibility study involving: baseline environmental studies; resource estimations; preliminary engineering and metallurgical studies and design work for both the onshore and offshore components; and preliminary economic and commercial studies to provide scoping estimates for CAPEX and OPEX for mining, transportation and processing options.

23. Starting in the fourth year, Tonga Offshore Mining would propose to commence a feasibility study. The purpose of this study would be to define to a high order of accuracy the engineering and design parameters required for the mining and processing of the nodule resource, as well as to complete detailed resource estimation work to provide sufficient resource and confidence in the resource parameters to allow project financing. As well as identifying first-generation mine sites, Tonga Offshore Mining would also propose to develop mining solutions to recover the nodules and transfer them to transport vessels, as well as completing a detailed assessment of the project's expected environmental impacts.

24. This section also demonstrates that Tonga Offshore Mining's plan of work provides for the effective protection of human health and safety, as well as the effective protection and preservation of the marine environment. A description of the programme for oceanographic and environmental baseline studies that Tonga Offshore Mining proposes to carry out is included, as well as the measures that will be taken to prevent, reduce and control possible environmental impacts. The proposed studies reflect those included in the recommendations issued by the Legal and Technical Commission in 2001, and would be carried out in accordance with the Regulations.

25. It is also ensured that no installations will be established where interference is caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity, and that prior to the commencement of exploration a training programme will be drawn up in cooperation with ISA and the sponsoring State, and submitted to ISA for approval.

Section 5: Undertakings

26. Section 5 contains a copy of the written undertakings signed by the Chairman of Tonga Offshore Mining Limited stating that it will comply with regulation 14 of the Regulations.

Section 6: Previous contracts with the International Seabed Authority

27. Section 6 states that Tonga Offshore Mining has not been awarded any previous contract with ISA.

28. Tonga Offshore Mining plans to successfully develop this project in a way that benefits the people of Tonga, ISA and the international community, and looks forward to working under the ISA regime to develop these resources within the Area.